Institute of Geosciences | Geophysics | Seismology | Volcanology

Luca De Siena

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Curriculum Vitae in Brief

Luca De Siena, born in Salerno (Italy) on 26/05/1980 - Married with two children.

Research, teaching, and institutional highlights

Honours: *Fellow:* Japan Society for the Promotion of Science; the Higher Education Academy; the Geological Society of London; High Performance Computing EUROPA2.

Sourced research funding since 2017: *€1.732.000* from the EU, NERC, JSPS, DFG, SAGES, PTDF, Royal Society of Edinburgh, Rein-Palatinate regional funds.

Research group: The ***Volcano Imaging Group*** - **2** post-docs, lead-supervised students at the UoA and JGU: **7** PhD and **19** BSc/MSc.

Peer-reviewed papers: ***39*** of which ***28*** since 2017; Citations: ***720*** of which ***393*** since 2019; h index: ***16***; h-10 index : ***21***.

Coordination and Teaching at JGU: ***Coordinator of the MSc Dynamics of the Lithosphere***; Teaching *Geodynamics* (MSc); *Intro to Geophysics* , *Geostatistics* and *Computational Geology* (BSc Geology and Physics) for $\sim$ *100 hrs* per year;

Teaching at UoA: *120 hrs* teaching per year at BSc (Geology) and MSc (Geophysics).

International Conferences and Seminars : ***EGU Officer, GMPV Division*** - 2017-2020; Convener of *10* EGU sessions since 2016, *4* as lead; *14* invited talks and keynote lectures at conferences. Presenter of *24* orals at international conferences.

Scientific Societies: *EGU* Life Member; AGU & DGG(2010-); GSL & JSPS (2015-)

Editor & Reviewer : Editor for ***Frontiers in Earth Science*** and ***Solid Earth***; Top ***1%*** reviewer in Geosciences and Multidisciplinary Science (Publons-Web of Sciences - 2018) with *12* peer-review/year for research papers and *3* projects peer-review/year (DFG, CNRS, NSF, NERC, EU Cost, MIUR) since 2017.

Personal and Professional Data

Professional history, education and skills

2020-: Habilitation as Associate Professor of Geophysics and as Associate Professor of Planetary Physics, from the ***Italian Ministry of University and Scientific Research***;

2019-present: Associate (W2) Professor of Geophysics with Volcanology at ***Johannes Gutenberg Universität*** (Mainz, Germany);

2014 - 2019: Lecturer in Geophysics (Seismology) with Tenure from 2017 at ***University of Aberdeen*** (Aberdeen, UK);

2010-2014: Post-doc Research Assistant (Wissenschaftlicher Miterbeiter) at the ***Westfälisches Wilhelms Universität*** (Münster, Germany);

2009-2010: Post-doc Researcher (Assegnista di Ricerca) at the ***INGV - Osservatorio Vesuviano*** (Napoli, Italy);

2009: PhD in Geophysics defended on **05/06/2009** and received from ***Alma Mater Studiorum, University of Bologna*** (Bologna, Italy);

2005: Diploma in Physics defended on **14/07/2005** and received from ***Universitá Federico II di Napoli*** (Napoli, Italy);

Research Interests: **G**eophysical imaging of volcanoes; **S**eismic tomography from rock sample to mantle scales; **T**heoretical and computational geophysics; **E**nvironmental Seismology; **S**eismic and volcanic hazards.

Languages: **Fluent** Italian + English; Advanced German (B1), and **Basic** French.

Computing Skills: Operating Systems: Unix, Linux, Windows; *Programming*: **Matlab**, Fortran, C, **C++**, Python, OpenMP, **MPI**, **LaTeX**, Paraview, Photoshop.

Code developer: Creator and primary developer of ***MuRAT***

Non-academic: Professional teacher of Tango Argentino since 2013.

Publications

Name of supervised students in italics red; Impact Factor = IF

2021

1. Petrosino S. and **L. De Siena** (2021). Fluid migrations and volcanic earthquakes from depolarized ambient noise. *Research Square*, in review on Nature:Communications. **DOI**
2. *Nardoni, C.*, **L. De Siena**, F. Cammarano, F. Magrini, E. Mattei (2021). Modelling regional-scale attenuation across Italy and the Tyrrhenian Sea. *Physics of the Earth and Planetary Interior*, 318, 106764. IF: 2.46 **DOI**.
3. *Di Martino-Perez, P.*, **L. De Siena**, D. Healy, S. Vialle (2021). Petro-mineralogical controls on coda attenuation in volcanic rock samples. *Geophysical Journal International*, 226 (1), 1858-1872. IF: 2.57 **DOI**.
4. *King, T.*, S. Vinciguerra, J. Burgess, P. Benson, **L. De Siena** (2021). Source mechanisms of laboratory earthquakes during fault nucleation and formation. *Journal of Geophysical Research: Solid Earth*, 126 (5), e2020JB021059. IF: 3.59 **DOI**
5. *Sketsiou, P.*, **L. De Siena**, *S. Gabrielli*, F. Napolitano, (2021). 3D attenuation image of fluid storage and tectonic interactions across the Pollino fault network. *Geophysical Journal International*, 226 (1), 536-547. IF: 2.57 **DOI**.
6. *Akande, W. G.*, Q. Gan, D. Cornwell, **L. De Siena** (2021). Thermo-Hydro-Mechanical Model and Caprock Deformation Explain the Onset of an On-going Seismo-volcanic Unrest. *Journal of Geophysical Research: Solid Earth*, 126, e2020JB020449. IF: 3.59 **DOI**.

2020

7. *King T.*, P. Benson, **L. De Siena**, S. Vinciguerra (2020). Acoustic Emission Waveform Picking with Time Delay Neural Networks During Rock Deformation Laboratory Experiments. *Seismological Research Letters*, 92(2A), 923-932. IF: 3.46 **DOI**.
8. *Guardo R.*, **L. De Siena**, C. Draideme (2020). Mt. Etna feeding system and sliding flank: a new 3D image from earthquakes distribution in a customisable GIS. *Frontiers in Earth Science*,8, 474. IF: 2.63 **DOI**.
9. *Gabrielli S.*, M. Spagnolo, **L. De Siena** (2020). Geomorphology and surface geology of Mount St. Helens volcano. *Journal of Maps*,16:2, 585-594. IF: 1.50
10. *Zenonos A.*, **L. De Siena**, S. Widyiantoro, N. Rawlinson (2020). Direct inversion of S-P differential arrival-times for Vp/Vs ratio in SE Asia. *Journal of Geophysical Research: Solid Earth*, 125(5), e2019JB019152. IF: 3.59 **DOI**.

11. *Gabrielli S.*, **L. De Siena**, *Napolitano F.*, E. Del Pezzo (2020). Understanding seismic path biases and magmatic activity at Mount St. Helens volcano before its 2004 eruption. *Geophysical Journal International*, 222(1) 169-188. IF: 2.53 **DOI**.
12. *Napolitano F.*, **L. De Siena**, A. Gervasi, I. Guerra, R. Scarpa, M. La Rocca (2020). Scattering and absorption imaging of a highly fractured fluid-filled seismogenetic volume in a region of slow deformation. *Geoscience Frontiers*. 11(3) 989-998. IF: 4.24 **DOI**.
13. Oppo, D., **L. De Siena**, D. B. Kemp. (2020). A record of seafloor methane seepage across the last 150 million years. *Scientific Reports: Nature Journals* 10.1: 1-12 IF: 4.1 **DOI**.
14. *Sketsiou P.*, *F. Napolitano*, *A. Zenonos*, **L. De Siena**, (2020). New insights into seismic absorption imaging. *Physics of the Earth and Planetary Interiors*, 298, 106337. IF: 2.46 **DOI**.

2019

15. Pepe S., **L. De Siena**, Barone A., Castaldo R., D Auria L., Manzo M., Casu F., Fedi M., Lanari R, Bianco F. and Tizzani P. (2019). Volcanic structures investigation through SAR and seismic interferometric methods: the 2011-2013 Campi Flegrei unrest episode. *Remote Sensing of Environment,* 134, 111440. IF: 8.89
16. *Akande, W. G.*, **L. De Siena**, Q. Gan (2019). Three-dimensional kernel-based coda attenuation imaging of caldera structures controlling the 1982?84 Campi Flegrei unrest. *Journal of Volcanology and Geothermal Research* 381, 273-283. IF: 2.57
17. *Zenonos A.*, **L. De Siena**, S. Widyiantoro, N. Rawlinson (2019). P- and S- wave travel time tomography of the SE Asia-Australia collision zone. *Physics of the Earth and Planetary Interior*, 293, 106267. IF: 2.46

2018

18. **De Siena, L.**, *C. Sammarco*, D. G. Cornwell, M. La Rocca, F. Bianco, L. Zaccarelli, H. Nakahara (2018). Ambient seismic noise image of the structurally-controlled heat and fluid feeder pathway at Campi Flegrei caldera. *Geophysical Research Letters* 45.13 (2018): 6428-6436. IF: 4.4
19. Del Pezzo, E., De La Torre, A., Bianco, F., Ibanez, J., Gabrielli, S., and **De Siena, L.** (2018). Numerically Calculated 3D Space-Weighting Functions to Image Crustal Volcanic Structures Using Diffuse Coda Waves. *Geosciences*, 8(5), 175. IF: 1.82
20. Barr I. D., C. M. Lynch, D. Mullan, **L. De Siena**, M. Spagnolo, 2018. Volcanic impacts on modern glaciers: a global synthesis. *Earth-Science Reviews* 182, pp. 186-203. IF: 9.54
21. Garcia-Yeguas A., A. Sanchez-Alzola, **L. De Siena**, J. Prudencio, A. Diaz-Moreno, J. M. Ibanez, 2018. Scattering images from autocorrelation functions of P-wave seismic velocity images: the case of Tenerife Island (Canary Islands, Spain). *Bulletin of Volcanology* 80.3: 24. IF: 2.32

2017

22. *King T.*, P. Benson, **L. De Siena** and S. Vinciguerra, 2017. Investigating the Apparent Seismic Diffusivity of Near-Receiver Geology at Mount St. Helens Volcano, USA *Geosciences* 7.4, 130. IF: 1.82
23. *Guardo R.* and **L. De Siena**, 2017. Integrating ambient noise with GIS for a new perspective on volcano imaging and monitoring: The case study of Mt. Etna. *Journal of Volcanology and Geothermal Research* 347, pp. 397-407. IF: 2.57
24. **De Siena, L.**, Giovanni Chiodini, Giuseppe Vilardo, Edoardo Del Pezzo, Mario Castellano, Simona Colombelli, Nicola Tisato, and Guido Ventura, 2017. Source and dynamics of a volcanic caldera unrest: Campi Flegrei, 1983–84. *Scientific reports: Nature Journals* 7, 8099. IF: 4.52
25. Chiodini, G., J. Selva, E. Del Pezzo, D. Marsan, **L. De Siena**, L. D Áuria, F. Bianco et al., 2017. Clues on the origin of post-2000 earthquakes at Campi Flegrei caldera (Italy). *Scientific reports: Nature Journals* 7, 4472. IF: 4.52
26. Borleanu, F., **De Siena, L.**, Thomas, C., Popa, M., and Radulian, M., 2017. Seismic scattering and absorption mapping from intermediate-depth earthquakes reveals complex tectonic interactions acting in the Vrancea region and surroundings (Romania). *Tectonophysics*, 706–707, pp. 129-142. IF: 3.01
27. **De Siena L.**, A. Amoruso, E. Del Pezzo, *Z. Wakeford*, M. Castellano, L. Crescentini, 2017. Space-weighted seismic attenuation mapping of the aseismic source of Campi Flegrei 1983–84 unrest. *Geophysical Research Letters*, 44.4 pp. 1740-1748. IF: 4.4
28. *Rizzo R.*, E., D. Healy, and **L. De Siena**, 2017. Benefits of maximum likelihood estimators for fracture attribute analysis: Implications for permeability and up-scaling. *Journal of Structural Geology*, 95, pp. 17-31. IF: 3.08

2016

29. **De Siena L.**, Calvet, M., *Watson, K.J.*, Jonkers, A.R.T. and Thomas, C., 2016. Seismic scattering and absorption mapping of debris flows, feeding paths, and tectonic units at Mount St. Helens volcano. *Earth and Planetary Science Letters*, 442, pp.21-31. IF: 4.64
30. Del Pezzo, E., J. M. Ibanez, I. Prudencio, F. Bianco, **L. De Siena**, 2016. Absorption and Scattering 2D Volcano Images from Numerically Calculated Space-weighting functions. *Geophysical Journal International*, 206 (2): 742-756. IF: 2.5

2015

31. *Prudencio J.,*, **L. De Siena**, J. M. Ibanez, E. Del Pezzo, A. Garcia–Yeguas, A. Diaz-Moreno, 2015a. The 3D Attenuation Structure of Deception Island (Antarctica). *Surveys in Geophysics*, 36 (3), 371-390, doi:10.1007/s10712-015-9322-6

32. *Prudencio J.*, J. M. Ibanez, E. Del Pezzo, J. Martí, A. Garcia–Yeguas, **L. De Siena**, 2015b. 3D Attenuation Tomography of the Volcanic Island of Tenerife (Canary Islands). *Surveys in Geophysics*, 36(5), pp. 693-716.

2014

33. **De Siena L.**, C. Thomas, G. Waite, S. Moran, and S. Klemme, 2014b. Attenuation and scattering tomography of the deep plumbing system of Mount St. Helens. *Journal of Geophysical Research: Solid Earth*, 119, 8223-8238.
34. **De Siena L.**, C. Thomas, and R. Aster, 2014a. Multi scale reasonable attenuation tomography analysis (MuRAT): an imaging algorithm designed for volcanic regions. *Journal of Volcanology and Geothermal Research*, 277, 22-35

2006-2013

35. **De Siena L.**, E. Del Pezzo, C. Thomas, A. Curtis and L. Margerin, 2013. Seismic energy envelopes in volcanic media: in need of boundary conditions. *Geophysical Journal International*, 192 (1), 326-345.
36. **De Siena L.**, E. Del Pezzo and F. Bianco, 2011. A scattering image of Campi Flegrei from the auto correlation functions of velocity tomograms. *Geophysical Journal International*, 184 (3), 1304 -1310.
37. **De Siena L.**, E. Del Pezzo, F Bianco, 2010. Seismic attenuation imaging of Campi Flegrei: Evidence of gas reservoirs, hydrothermal basins, and feeding systems. *Journal of Geophysical Research: Solid Earth* 115, B09312, 18 pp. doi:10.1029/2009JB006938.
38. **De Siena L.**, E. Del Pezzo, F. Bianco and A. Tramelli, 2009. Multiple resolution seismic attenuation imaging at Mt. Vesuvius. Physics of the Earth and Plan. Interior, vol 173, 17-32.
39. Petrosino S., **L. De Siena**, E. Del Pezzo, 2008. Recalibration of the Magnitude Scales at Campi Flegrei, Italy, on the Basis of Measured Path and Site and Transfer Functions. *Bulletin of the Seismological Society of America*, vol. 98, pag. 1964-1974.
40. Del Pezzo E., F. Bianco, **L. De Siena**, A. Zollo, 2006. Small scale shallow attenuation structure at Mt. Vesuvius, Italy. *Physics of the Earth and Planetary Interior*, vol. 157, pag. 257-268.

Invited Talks and Convenor

2020

1. **Keynote Speaker** at the Online SAGES Meeting, Scotland, UK
2. **Invited Online Kolloquium** at the WWU Münster, Germany
3. **Invited Online Talk** at the AG Seismologie Meeting, Germany
4. **Invited Online Talk** at the DGG Annual Meeting, Germany
5. **Online Presentation** at EGU 2020 (Vienna, Austria)

2019

6. **Keynote Presentations** at the Italian Society of Physics (L'Aquila - Italy)
7. **Invited Talk** at the School of Geosciences, University of Texas (Austin, US)
8. **Invited Talk** at the Earth Resources Lab, Massachusetts Institute for Technology (Boston, US)
9. **Invited Talk** at the Lamont-Doherty Observatory (New York, US)
10. **Invited Kolloquium** at the Faculty of Earth Science, Goethe Universität (Frankfurt, Germany)
11. **Two Oral Presentations** at EGU 2019 (Vienna, Austria)

2018

12. **Keynote Presentations** at the 4th Training Course for the EU TIDES COST Action (Prague, Czech Republic).
13. **Invited Talk** at the Paul Sabatier University - Toulouse III, (Toulouse, France).
14. **Invited Presentation** at the Annual SAGES Conference - (Edinburgh, UK).
15. **Two Oral Presentations** at EGU 2018 (Vienna, Austria).

2017

16. **One Invited**, three oral and one poster Presentations at EGU 2017 (Vienna, Austria).
17. **Invited Talk** at IREA (Istituto Telerilevamento Ambientale - Napoli, Italy).
18. **Invited Talk** at Roma III University (Rome, Italy).
19. **Invited Talk** at Herriott Watts University (Edinburgh, UK)

2016

20. **One Oral** and one Poster Presentations at EGU 2016 (Vienna, Austria).
21. **Invited Talk** in the framework of the JSPS Invitation Fellowship at Tohoku University (Sendai, Japan)
22. **Invited Talk** in the framework of the JSPS Invitation Fellowship at Earth Research Institute (Tokyo, Japan)

23. **Invited Talk** in the framework of the JSPS Invitation Fellowship at Earth and Life Science Institute(Tokyo, Japan)
24. **Invited Talk** at Perugia University (Perugia, Italy).

2015

25. **One Oral** and one Poster Presentations at EGU 2015 (Vienna, Austria).
26. **Invited Talk** at Earth and Science Dept., University of St. Andrews (UK)
27. **Invited Talk** at University of Napoli Federico II (Italy)
28. **Invited Talk** Dept. of Geology, University of Leicester (UK)
29. **Invited Talk** at University of Salerno (Italy)
30. **Invited Talk** at INGV Osservatorio Vesuviano (Italy)

2014

31. **Invited Talk** at Tohoku University (Sendai, Japan)
32. **Invited Talk** at Earth Research Institute (Tokyo, Japan)
33. **Invited Talk** at Unzen Volcano Observatory (Shimabara, Japan)
34. **Invited Talk** at National Research Institute for Earth Science and Disaster Prevention (Tsukuba, Japan,)

2010-2013

35. **Invited Talk** at University of Utrecht (the Netherlands)
36. **Keynote presentation** at the 2nd Neustad Conference on Diffusive Wavefields
37. **Invited Talk** at LMU Munich (Germany)
38. **Invited Talk** at WWU Münster (Germany)

Convenor Activity

- **EGU 2013** - Anisotropy and small-scale heterogeneity in the Solid Earth: Observations, models and implications.
- **EGU 2016** - Geophysical Imaging of volcanoes.
- **EGU 2016 - 2017** - Integrating multi-scale measurements and images of the physical properties of the Earth from the laboratory to the Deep Earth.
- **EGU 2018** - **V**olcano resources; **S**ages Town-hall meeting.
- **EGU 2018-2019** - **G**eophysical imaging of volcanoes;
- **European Seismological Commission 2019** - **A**dvances in Volcano Seismology;
- **EGU 2020-2021** - **V**olcano imaging and monitoring with networks.

Funded projects

As Principal Investigator:

2020

1. **A combined imaging and modelling approach to understand magmatic systems across the SE Asia-Australia collision zone** - 232 k€(DFG - Standard Grant) - (2021-2023). **Role:PI**

2019

2. **TeMAS - Terrestrial Magmatic Systems Research Platform** - 500 k€(JGU Mainz) - (2019-2023). **Role:Leader of the Mainz Seismology group**
3. **MODEL - Mainz Institute of Multiscale Modeling** - 800 k€(Exellenzproject im Rahmen der Forschungsinitiative des Landes Rheinland-Pfalz) - (July 2019-December 2023). **Role:Co-leader of the Mainz Geophysics group**

2018

4. **SAGES PEER and PECRE awards** - 5 k£(Scottish Alliance for Geosciences, Environment and Society) - (2018-2019)
5. **Petroleum Technology Development fund** - a PhD studentship for 3 years + 10k£for research expenses (2018-2021)
6. **Aberdeen-Curtin Alliance** - three year PhD studentship + 5k£for research expenses (2018-2021)

2016

7. **NERC CDT Oil and Gas** - four year PhD studentship + 20k£for research expenses (2016-2020)
8. **Elphinstone Scholarship** - 6 months PhD studentship + 6k£for research expenses (2016-2019)
9. **School of Geosciences Scholarship** - wave of tuition + 6k£for research expenses (2016-2019)
10. **School of Geosciences Scholarship** - wave of tuition + 6k£for research expenses (2016-2019)
11. **School of Geosciences Scholarship** - wave of tuition + 6k£for research expenses (2016-2019)
12. **VALIDATE forum - Monitoring volcanoes' interaction with diverse Earth and human environments** - 3 k£(Scottish Alliance for Geosciences, Environment and Society) - (2016-2019)
13. **JSPS Invitational Fellowship** - 10 k£(Japan Society for the Promotion of Science) - (2016-2017)
14. **EU TIDES COST Award** - 2 k£(EU) - (2016-2017)
15. **Royal Society of Edinburgh - Accademia dei Lincei Travel Grant** - 2 k£(EU) - (2016-2017)

As Collaborator

2010-2014

1. EU Projects: SISMO-VOL; EPHESTOS; TOMO-TEIDEVS (PI Ibañez);
2. INGV DPC V2 (PI Del Pezzo);
3. Spainish Government: PICASSO - Münster Array (PI Thomas);
4. University of Torino:Integrating multi-scale tomography techniques for determining the physical properties of the Earth from laboratory experiments to field scale: applications to volcano seismology. (PI Sergio Vinciguerra);
5. CONICET, Argentina: Seismic Multi-scale images interpretation of Copahue Volcano obtained by analysis of energy and travel times.

Teaching and Institutional Duties

2019-2020

- **Program Coordination** MSc - *Dynamics of the Lithosphere*;
- Course Coordination and delivery MSc - Geodynamics - 40 hrs per year;
- Course Coordination and delivery BSc Physics and Earth Sciences - Introduction to Geophysics - 40 hrs per year;
- Course Coordination and delivery BSc Physics and Earth Sciences - Geostatistics 2 - 40 hrs per year;
- Course Coordination and delivery BSc Earth Sciences - Numerical Geology - 40 hrs per year;

University of Aberdeen - 2014-2019

- **University of Aberdeen EU Advisory Board member** for the School of Geosciences
- **Erasmus coordinator** at the School of Geosciences
- **Member of the Athena Swan committee** for equality in Academia, School of Geosciences
- **Designer and coordinator** of the BSc Geophysics
- Research Board of the School of Geosciences
- Course coordination and delivery of Inversion Problem and Statistics - 80 hrs per year
- Course coordination and delivery of Time series analysis and signal processing - 80 hrs per year
- Delivery of Restless Vulcan, 20 hrs per year
- Delivery of Earth through Geological Time, 20 hrs per year

Esteem Factors

- **Guest Editor** for *Frontier in Earth Sciences* and *Solid Earth*
- **Reviewer Editor** for *Frontier in Earth Sciences*
- **GMPV Program Officer** for EGU 2017-2020
- **Programme Committee Chair** (2016-2019) and **Panel Member** of the **SAGES Validate Forum** (UK)

Post docs and theses supervised

Post docs

- **Fabrizio Magrini** - 2021-2023: **Mainz** - *A combined imaging and modelling approach to understand magmatic systems across the SE Asia-Australia collision zone.* - Funded by DFG Standard Grant.
- **Florian Schmidt** - 2021-2023: **Mainz, 2022-2023** - *SEISMOS-KOLUMBO – Seismological and structural investigations of the Kolumbo submarine volcano in the southern Aegean.*Funded by the Walter Benjamin Programme, DFG

PhD - to completion

- **Roberto Guardo**, University of Rio Negro, Argentina - 2015-2020 - lead supervision;
- **Simona Gabrielli**, Aberdeen - 2016-2020 - lead supervision. Today: post-doc at INGV-Rome (Italy);
- **Aristides Zenonos**, Aberdeen - 2017-2020 - co-supervision. Today: post-doc at University of Cyprus (Cyprus);
- **Ferdinando Napolitano**, University of Salerno 2018-2020- co-supervision abroad. Today: post-doc at University of Salerno (Italy);
- **Janire Prudencio**, University of Granada, 2010-2013 - co-supervisor abroad. Today: Assistant Professor at University of Granada;
- **Roberto Emanuele Rizzo**, Aberdeen 2015-2018 - co-supervision. Today: post-doc at Herriot Watts (UK);
- **Thomas King**, University of Torino, Italy, 2017-2020 - co-supervisor abroad. Today: post-doc at INGV-Catania (Italy);

PhD, Lead supervision, ongoing:

- **Yi Zhang**, Mainz -2020-2023;
- **Panayota Skietsou**, Aberdeen -2016-2021;
- **Waheed Akande**, Aberdeen - 2018-2021;
- **Pilar Di Martino-Perez**, Aberdeen - 2018-2021;

PhD, co-supervision, ongoing:

- **Chiara Nardoni**, University of Rome, Italy 2019-2022;
- **William Harcourt**, University of St. Andrews, UK 2019-2022;
- **Jan Jaszewski**, University of Aberdeen, UK 2019-2022;
- **Domenico Talone**, University of Chieti, Italy 2020-2022;

Master and Bachelor

- **Katrin Löer**, MsC in Münster 2011.Now Lecturer at University of Aberdeen;
- **Carina Häger**, BsC and MsC in Muenster 2013-2015. Now Post-doc at GFZ Potsdam, Germany;
- **Laura Schmidt**, BsC in Münster 2014;
- **Martina Guzavina** BsC in Münster 2014. Now PhD at ETH Zurich, Switzerland;
- **Thomas King**, MsC in Aberdeen 2015. Now Post-doc at INGV Catania, Italy;
- **Kathleen Asena** MsC in Aberdeen 2016;
- **Pan Yaocen**, MsC in Aberdeen 2016. Now PhD in Uppsala, Sweden.
- **Carlos Colombo**, MsC in Aberdeen 2017. Now PhD at Herriot Watts, UK.
- **Rachit Goulam**, BsC in Mainz. Now MSc in Mainz.
- **Michelle Bensing**, MsC in Mainz.

Major Collaborations by Institutions

- **Nick Rawlinson**, *BP-McKenzie Chair in Earth Sciences, University of Cambridge, UK*: on tomographic and interferometric modelling of the crust/lithosphere. Former mentor in Aberdeen. - 2 PhD students supervised together.
- **David Haley, David Cornwell, and Matteo Spagnolo**, Researchers at the University of Aberdeen, UK: on porosity permeability imaging of rock samples in commercial applications; fault, water-resources monitoring and volcano-ice interaction - 3 PhD students supervised together.
- **Edoardo Del Pezzo and Francesca Bianco**, Full professor (emeritus) and Director of the INGV-Osservatorio Vesuviano, Italy: on volcano imaging, monitoring and resilience projects in the Naples Metropolitan area. Supervisors of the PhD.
- **Jesús Ibañez**, Full professor at Granada University, Spain: on volcano imaging and monitoring. PI of many projects undergone between 2010 and 2014. Supervision of 1 PhD.
- **Christine Thomas**, W3 Professor of seismology at WWU Münster, Germany: on attenuation and scattering modelling of volcanism in combination with array analysis. Post-doc supervisor in Münster.
- **Boris Kaus**, W3 Professor in Geodynamics at JGU Mainz, Germany: joint seismic and geodynamical inversion of magmatic systems, co-chair of TeMAS and co-PI in the "Model Research Institute".

Want to know more? Ask:

Prof. Nick Rawlinson - former mentor at the University of Aberdeen
BP-McKenzie Chair in Earth Sciences, Department of Earth Sciences,
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email: nr441@cam.ac.uk

Prof. Christine Thomas - former post-doc supervisor at the WWU Münster
Westfälische Wilhelms Universität
Corrensstrasse 24
48149 Münster, Germany
Phone: +49 251-8333591
email: tine@earth.uni-muenster.de

Prof. Edoardo Del Pezzo - former PhD supervisor at INGV-Osservatorio Vesuviano
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Napoli 80124 Italy
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Prof. Andrew Curtis - co-author and supervisor at HPC-Europa2
School of Geosciences,
University of Edinburgh, Edinburgh, Scotland.
Phone: +44 (0) 131 650 8515
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Prof. Richard C. Aster - co-author
College of Natural Sciences
Colorado State University, Fort Collins, US.
email: rick.aster@colostate.edu